UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,176	02/01/2002	Richard E. Rowe	IGT1P048/P-537	2727

22434 7590 03/13/2007 BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250	**EXAMINER** RATHINASAMY, PALANI P

ART UNIT	PAPER NUMBER
3622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/066,176	ROWE ET AL.
	Examiner	Art Unit	
	Palani P. Rathinasamy	3622	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-26_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _01 February 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _10/22/2002, 04/03/2006_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed steps do not produce a "useful, concrete, and tangible" result. For example, in independent claim 1, applicant teaches of comparing attributes between individuals to create sets and subsets. Manipulating data into sets and subsets does not produce a useful result. Dependent claim 9 comes close to overcoming this rejection because it utilizes the sets and subsets to generate a marketing strategy. However, this claim does not overcome the "useful" rejection because, inter alia, it does not produce a unique response for each set/subset.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4.   Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear to the examiner how it would be possible to have a query attribute that is

used to find similar individuals also be in the group of attributes that is used to find

"difference[s]" between individuals.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claim 9-11 are rejected as lacking a missing step. These claims depend on

independent claim 1. Independent claim 1 determines attributes that are different

amongst individuals and does not actually form subsets. Claims 9-11 recite the

limitation of "for at least one of the further subsets." The step of forming subsets is

missing.

7.   Claims 1-4, 18, and 21 are rejected as being generally narrative and indefinite,

failing to conform with current U.S. practice. They are replete with grammatical and

idiomatic errors. Examiner is unable to clearly understand what the applicant is

claiming as their invention. For example, in claim 1, examiner does not understand if

the "selected attributes" associated with the individuals is the same as the "selected

attributes" associated with others. For claim 3, examiner does not understand which

group the selected attributes is referring to. Also, these claims are full of grammatical

errors. For example, in claim 3, "wherein the selected attributes include *the* at least one

attribute corresponding ...".

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   **Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Dandurand ("Market Niche Analysis In the Casino Gaming Industry", Journal of

Gambling Studies, Vol. 6(1), Spring 1990).

10.   Regarding claims 1, 18, 21 and 24, applicant teaches a method of analyzing data

consisting of a first subset, and determining a difference among the attributes so that

the "first subset" can be subdivided. Dandurand teaches of a similar method of

analyzing casino customers and segmenting them into groups and sub-groups. (Page

78). Dandurand gives an example where by customers are first grouped based on their

"Slot Gaming Budget." (Page 82, Table 1). Then, players with a budget greater than

$500 are further sub-divided based on other attributes. (Page 83, Table 2).

11.   Regarding claims 14-15, 18, 21 and 24, applicant teaches of a computerized

system to implement the method. Dandurand does not explicitly teach that this method

is accomplished using a computer, however, Dandurand teaches of Management

Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer

system designed to help managers plan and direct business and organizational

operations. (Dictionary.com). An automatic means to replace a manual activity which

accomplished the same result is not sufficient to distinguish over the prior art. *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Additionally, applicant teaches that it is already common for data to be collected and searched in "database queries". (Specification, Page 2). *See* MPEP § 2144.04.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a computer to automate the data analysis that Dandurand teaches. One would have been motivated to do so in order to save time and to take advantage of the computing power of a computer.

12.   Regarding claim 2, applicant teaches that the "query" to create the "first subset" is one of the attributes to which the individuals have in common. Similarly, in the example given by Dandurand, the customers are sorted based on their "slot gaming budget." Those who have a budget greater than $500 are placed in the group "premium" which is then further segmented.

13.   Regarding claim 3, applicant teaches that the "query" attribute that is used to create the "first subset" is part of the "selected attributes." The query attribute in claim 2 is used to create a "first subset" whereby all individuals in this group have at least the "query attribute." However, applicant states in claim 1 that the "selected attributes" are compared in order to determine a "difference" between individuals. Also, please see 35 U.S.C. 112 claim rejection above. It is unclear to the examiner how it would be possible to have a query attribute that is used to find similar individuals also be in the group of attributes that is used to find "difference[s]" between individuals.

14.   Regarding claim 4, applicant teaches that the "query" attribute that is used to create the "first subset" is not part of the selected attributes. Dandurand's first sorts the data based on "Slot Gaming Budget." (Page 82). Dandurand then compares the individuals in a specific category based on other attributes, none being "Slot Gaming Budget." (Page 83).

15.   Regarding claim 5, applicant teaches of defining a "gaming DNA". Applicant teaches that a "gaming DNA" for an individual is "any subset of the attributes stored in the system's player tracking database." (Specification, Page 14). Dandurand teaches creating user profiles with selected variables. (Page 82)

16.   Regarding claims 6, 7, and 8, applicant teaches that the attributes of the "gaming DNA" can be equal to, more than or less than the "selected attributes." Applicant teaches that the DNA may "vary from analysis to analysis." (Specification, Page 14). The DNA may be "redefined each time the player tracking database is mined." (Id.). Dandurand does not explicitly teach every possibility, however, Dandurand teaches that the profile is composed of selected variables. (Page 82) Dandurand further teaches that the profile could be expanded into a "richer profile" with more variables or could be reduced to focus on a niche. (Page 83, 84).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have created the user profile with any number of user attributes. One would have been motivated to do so in order to expand or reduce the "niche" market.

17.   Regarding claim 9, applicant teaches of "generating a marketing strategy."
Dandurand teaches of a target market strategy on the segmented groups. (Page 74).

18.   Regarding claim 10, applicant teaches that the marketing strategy comprises
"identifying at least one single relational polymorphism" between the subsets. Applicant
teaches that a "single relational polymorphism" is an attribute which is different for a
subset of individuals. (Specification, Page 17). Dandurand teaches of a similar method
whereby the marketing strategy is focused on specific sub-groups, or "niche markets."
(Page 83). These "sub-groups" share the same parent group; in this case, budgets
greater than $500.

19.   Regarding claim 11 and 13, applicant teaches that the attribute for the "single
relational polymorphism" is age, geographical region, gender, income, etc. Dandurand
teaches of similar attributes. (Page 83, Table 2).

20.   Regarding claim 12, and 17, applicant teaches that the database consists of a
player tracking database and the individuals correspond to players. Dandurand teaches
a similar method of using "Las Vegas Visitor Profile" as the database that consists of
players gambling in Las Vegas. (Page 82).

21.   Regarding claim 16, 17, 19, 20, 22, 23, 25, and 26, applicant teaches that the
database comprises "player tracking data". Dandurand teaches of similar tracking data,
such as average bet at electronic slots. (Page 83)

22.   **Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dandurand ("Market Niche Analysis In the Casino Gaming Industry", Journal of Gambling Studies, Vol. 6(1), Spring 1990) in view of Sheppard (US 6,026,397).**

23.   Regarding claims 1, 18, 21 and 24, applicant teaches a method of analyzing data consisting of a first subset, and determining a difference among the attributes so that the "first subset" can be subdivided. Dandurand teaches of a similar method of analyzing casino customers and segmenting them into groups and sub-groups. (Page 78). Dandurand gives an example where by customers are first grouped based on their "Slot Gaming Budget." (Page 82, Table 1). Then, players with a budget greater than $500 are further sub-divided based on other attributes. (Page 83, Table 2).

24.   Regarding claim 1, 14-15, 18, 21, and 24, applicant teaches of a computerized system to implement the method. Dandurand does not explicitly teach that this method is accomplished using a computer, however, Dandurand teaches of Management Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer system designed to help managers plan and direct business and organizational operations. (Dictionary.com). Sheppard teaches of a method for using a computer to segment databases into groups and sub-groups. (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a computer to automate the data analysis process. One would have been motivated to do so in order to save time and to take advantage of the computing power of a computer.

25.   Regarding dependent claims 2-13, 16-17, 19-20, 22-23, 25-26, the rejection

above in ¶¶ 9-21 applies here.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Palani P. Rathinasamy whose telephone number is (571) 272-5906. The examiner can normally be reached on M-F 8:30-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PPR

Arthur Duran
Primary Examiner